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NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS	4	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAPLUS
NEWS	5	FEB 05	German (DE) application and patent publication number format changes
NEWS	6	MAR 03	MEDLINE and LMEADLINE reloaded
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 03	FRANCEPAT now available on STN
NEWS	9	MAR 29	Pharmaceutical Substances (PS) now available on STN
NEWS	10	MAR 29	WPIFV now available on STN
NEWS	11	MAR 29	New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS	12	APR 26	PROMT: New display field available
NEWS	13	APR 26	IFIPAT/IFIUDB/IFICDB: New super search and display field available
NEWS	14	APR 26	LITALERT now available on STN
NEWS	15	APR 27	NLDB: New search and display fields available
NEWS	16	May 10	PROUSDDR now available on STN
NEWS	17	May 19	PROUSDDR: One FREE connect hour, per account, in both May and June 2004
NEWS	18	May 12	EXTEND option available in structure searching
NEWS	19	May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS	20	May 17	FRFULL now available on STN
NEWS	21	May 27	STN User Update to be held June 7 and June 8 at the SLA 2004 Conference
NEWS	22	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAPLUS
NEWS	23	May 27	CAPLUS super roles and document types searchable in REGISTRY
NEWS	24	May 27	Explore APOLLIT with free connect time in June 2004
NEWS EXPRESS			MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:13:37 ON 04 JUN 2004

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'STNGUIDE' ENTERED AT 15:13:42 ON 04 JUN 2004  
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 28, 2004 (20040528/UP).

=> FIL HOME

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	0.27

FILE 'HOME' ENTERED AT 15:13:47 ON 04 JUN 2004

=> file medline, uspatful, dgene, embase, wpids, fsta, japio, jicst, biosis

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.48

FILE 'MEDLINE' ENTERED AT 15:14:17 ON 04 JUN 2004

FILE 'USPATFULL' ENTERED AT 15:14:17 ON 04 JUN 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 15:14:17 ON 04 JUN 2004  
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FILE 'EMBASE' ENTERED AT 15:14:17 ON 04 JUN 2004  
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FILE 'FSTA' ENTERED AT 15:14:17 ON 04 JUN 2004  
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FILE 'JAPIO' ENTERED AT 15:14:17 ON 04 JUN 2004  
COPYRIGHT (C) 2004 Japanese Patent Office (JPO) - JAPIO

FILE 'JICST-EPLUS' ENTERED AT 15:14:17 ON 04 JUN 2004  
COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)

FILE 'BIOSIS' ENTERED AT 15:14:17 ON 04 JUN 2004  
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC. (R)

=> s Klebsiella or citrobacter

L1 98740 KLEBSIELLA OR CITROBACTER

=> s zygosaccharomyces

L2 2726 ZYGOSACCHAROMYCES

=> s debaryomyces

L3 2524 DEBARYOMYCES

=> s l1 and l2

L4 158 L1 AND L2

=> s l4amd ;3

L5 0 L4AMD

3 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s l4 and l3

L6 53 L4 AND L3

=> s hansenula

L7 9938 HANSENULA

=> s l7 an dl6

MISSING OPERATOR L7 AN

The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s l7 and l6

L8 44 L7 AND L6

=> s bioconversion process

L9 382 BIOCONVERSION PROCESS

=> s l9 and (1,3-propanediol)

5 FILES SEARCHED...

L10 4 L9 AND (1,3-PROPANEDIOL)

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

TI Biotransformation of 2,2-dimethyl-1,3-  
**propanediol** to 3-hydroxypivalic acid by Acetobacter acetii  
DSMZ3508 and related bacteria.

AB Acetobacter acetii DSMZ3508 and related bacteria converted 2,2-dimethyl-  
1,3-**propanediol** into 3-hydroxypivalic acid  
(2,2-dimethyl-3-hydroxypropionic acid; 3HP) during submerged cultivation  
in mineral salt medium. The maximum yield of 3-hydroxypivalic acid was  
24.4% of the fed substrate after 18 days. Cultivation parameters, as pH,  
cell density, optimal substrate concentration, and oxygen supply for the  
**bioconversion process** were determined.

ACCESSION NUMBER: 1998207842 EMBASE

TITLE: Biotransformation of 2,2-dimethyl-1,3-  
**propanediol** to 3-hydroxypivalic acid by Acetobacter  
acetii DSMZ3508 and related bacteria.

AUTHOR: Fuchtenbusch B.; Waltermann M.; Steinbuchel A.

CORPORATE SOURCE: B. Fuchtenbusch, Institut für Mikrobiologie, Westfälischen  
Wilhelms-Univ. Münster, Corrensstrasse 3, D-48149 Münster,  
Germany

SOURCE: Biotechnology Letters, (1998) 20/5 (507-510).

Refs: 9

ISSN: 0141-5492 CODEN: BILED3

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology

LANGUAGE: English

SUMMARY LANGUAGE: English

L10 ANSWER 2 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI Production of 1,3-propane diol, useful in polymer production - by fermenting carbon source with single dehydratase expressing microbe, partic. recombinant E. coli carrying Klebsiella gene.

AN 1996-518684 [51] WPIDS

CR 2001-257443 [26]

AB WO 9635796 A UPAB: 20030513

**Bioconversion process** to produce 1,3-**propanediol**, comprises incubating a carbon substrate with a single microorganism containing at least 1 gene expressing a dehydratase.

USE - 1,3-**propanediol** is used in the production of polyester fibres, polyurethanes and cyclic cpds..

ADVANTAGE - 1,3-**propanediol** can be produced rapidly, inexpensively and in an environmentally acceptable procedure.

Dwg.0/2

ABEQ US 5686276 A UPAB: 19971222

A process comprising the bioconversion of a carbon substrate, other than glycerol or dihydroxyacetone, to 1,3-

**propanediol** by a single microorganism having at least one gene that expresses a dehydratase enzyme by contacting the microorganism with the substrate.

Dwg.0/2

ACCESSION NUMBER: 1996-518684 [51] WPIDS

CROSS REFERENCE: 2001-257443 [26]

DOC. NO. CPI: C1996-162922

TITLE: Production of 1,3-propane diol, useful in polymer production - by

fermenting carbon source with single dehydratase expressing microbe, partic. recombinant E. coli carrying Klebsiella gene.

DERWENT CLASS: A41 D16 E17 F01

INVENTOR(S): LAFFEND, L A; NAGARAJAN, V; NAKAMURA, C E

PATENT ASSIGNEE(S): (DUPO) DU PONT DE NEMOURS & CO E I; (GEMV) GENENCOR INT INC

COUNTRY COUNT: 64

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9635796	A1	19961114	(199651)*	EN	109
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD					
SE SZ UG					
W: AL AU BB BG BR CA CN CZ EE GE HU IS JP KP KR LK LR LT LV MG MK MN					
MX NO NZ PL RO SG SI SK TR TT UA US UZ VN					
AU 9656789	A	19961129	(199712)		
US 5686276	A	19971111	(199751)		14
ZA 9603737	A	19980128	(199810)		84
EP 826057	A1	19980304	(199813)	EN	
R: AT BE CH DE DK ES FI FR GB IE IT LI NL PT SE					
JP 11502718	W	19990309	(199920)		133
BR 9608831	A	19990615	(199929)		
MX 9708687	A1	19980201	(199954)		
US 6025184	A	20000215	(200016)		
KR 99014710	A	19990225	(200018)		
AU 725012	B	20001005	(200054)		
AU 2000071565	A	20010208	(200113)#		
IL 118169	A	20010319	(200129)		
MX 201521	B	20010424	(200223)		
IL 130789	A	20020421	(200240)		
CN 1189854	A	19980805	(200272)		
JP 3403412	B2	20030506	(200330)		56

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9635796	A1	WO 1996-US6705	19960510
AU 9656789	A	AU 1996-56789	19960510
US 5686276	A	US 1995-440293	19950512
ZA 9603737	A	ZA 1996-3737	19960510
EP 826057	A1	EP 1996-913988	19960510
		WO 1996-US6705	19960510
JP 11502718	W	JP 1996-534295	19960510
		WO 1996-US6705	19960510
BR 9608831	A	BR 1996-8831	19960510
		WO 1996-US6705	19960510
MX 9708687	A1	MX 1997-8687	19971111
US 6025184	A Div ex	US 1995-440293	19950512
		US 1997-966794	19971110
KR 99014710	A	WO 1996-US6705	19960510
		KR 1997-708052	19971111
AU 725012	B	AU 1996-56789	19960510
AU 2000071565	A Div ex	AU 1996-56789	19960510
		AU 2000-71565	20001113
IL 118169	A	IL 1996-118169	19960507
MX 201521	B	MX 1997-8687	19971111
IL 130789	A Div ex	IL 1996-118169	19960507
		IL 1996-130789	19960507
CN 1189854	A	CN 1996-195288	19960510
JP 3403412	B2	JP 1996-534295	19960510
		WO 1996-US6705	19960510

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9656789	A Based on	WO 9635796
EP 826057	A1 Based on	WO 9635796
JP 11502718	W Based on	WO 9635796
BR 9608831	A Based on	WO 9635796
US 6025184	A Div ex	US 5686276
KR 99014710	A Based on	WO 9635796
AU 725012	B Previous Publ. Based on	AU 9656789
		WO 9635796
AU 2000071565	A Div ex	AU 725012
IL 130789	A Div ex	IL 118169
JP 3403412	B2 Previous Publ. Based on	JP 11502718
		WO 9635796

PRIORITY APPLN. INFO: US 1995-440293 19950512; US  
1997-966794 19971110; AU  
2000-71565 20001113

L10 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
TI Production of **1,3-propanediol** from glycerol

by recombinant bacteria expressing recombinant diol dehydratase.

ACCESSION NUMBER: 2002:126435 BIOSIS

DOCUMENT NUMBER: PREV200200126435

TITLE: Production of **1,3-propanediol**  
from glycerol by recombinant bacteria expressing  
recombinant diol dehydratase.

AUTHOR(S): Nagarajan, V [Inventor]; Nakamura, C. E. [Inventor]

CORPORATE SOURCE: Wilmington, Del., USA

ASSIGNEE: E. I. DU PONT DE NEMOURS AND COMPANY

PATENT INFORMATION: US 5821092 Oct. 13, 1998

SOURCE: Official Gazette of the United States Patent and Trademark  
Office Patents, (Oct. 13, 1998) Vol. 1215, No. 2, pp. 1790.  
print.  
CODEN: OGUPE7. ISSN: 0098-1133.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
ENTRY DATE: Entered STN: 30 Jan 2002  
Last Updated on STN: 26 Feb 2002

L10 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
TI Biotransformation of 2,2-dimethyl-1,3-  
**propanediol** to 3-hydroxypivalic acid by Acetobacter acetii  
DSMZ3508 and related bacteria.  
AB Acetobacter acetii DSMZ3508 and related bacteria converted 2,2-dimethyl-  
1,3-**propanediol** into 3-hydroxypivalic acid  
(2,2-dimethyl-3-hydroxypropionic acid; 3HP) during submerged cultivation  
in mineral salt medium. The maximum yield of 3-hydroxypivalic acid was  
24.4% of the fed substrate after 18 days. Cultivation parameters, as pH,  
cell density, optimal substrate concentration, and oxygen supply for the  
**bioconversion process** were determined.  
ACCESSION NUMBER: 1998:324244 BIOSIS  
DOCUMENT NUMBER: PREV199800324244  
TITLE: Biotransformation of 2,2-dimethyl-1,3-  
**propanediol** to 3-hydroxypivalic acid by Acetobacter  
acetii DSMZ3508 and related bacteria.  
AUTHOR(S): Fuechtenbusch, Bernd; Waeltermann, Marc; Steinbuechel,  
Alexander  
CORPORATE SOURCE: Inst. Mikrobiol. Westfaelischen Wilhelms-Univ. Muenster,  
Corrensstrasse 3, D-48149 Muenster, Germany  
SOURCE: Biotechnology Letters, (May, 1998) Vol. 20, No. 5, pp.  
507-510. print.  
CODEN: BILED3. ISSN: 0141-5492.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 22 Jul 1998  
Last Updated on STN: 10 Sep 1998

=> d his

(FILE 'HOME' ENTERED AT 15:13:37 ON 04 JUN 2004)

FILE 'STNGUIDE' ENTERED AT 15:13:42 ON 04 JUN 2004

FILE 'HOME' ENTERED AT 15:13:47 ON 04 JUN 2004

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, JAPIO, JICST-EPLUS,  
BIOSIS' ENTERED AT 15:14:17 ON 04 JUN 2004

L1 98740 S KLEBSIELLA OR CITROBACTER  
L2 2726 S ZYGOSACCHAROMYCES  
L3 2524 S DEBARYOMYCES  
L4 158 S L1 AND L2  
L5 0 S L4AMD  
L6 53 S L4 AND L3  
L7 9938 S HANSENULA  
L8 44 S L7 AND L6  
L9 382 S BIOCONVERSION PROCESS  
L10 4 S L9 AND (1,3-PROPANEDIOL)

=> s l10 and l8

L11 0 L10 AND L8

=> s glycerol dehydratase

L12 479 GLYCEROL DEHYDRATASE

=> s l12 and dihydrocacetone  
L13 0 L12 AND DIHYDOCACETONE

=>

=>

=>

=>

=>

=>

=> s l12 and dihydroxacetone  
L14 0 L12 AND DIHYDROXACETONE

=> d l8 ti abs ibib 1-20

L8 ANSWER 1 OF 44 USPATFULL on STN  
TI Microbial conversion of glucose to para-hydroxystyrene  
AB An in vivo method for the production of pHS via a recombinant host cell is disclosed. The host cell expresses at least one gene encoding a polypeptide having para-hydroxycinnamic acid decarboxylase activity in combination with either at least one gene encoding a polypeptide having tyrosine ammonia lyase activity or at least one gene encoding a polypeptide having phenylalanine ammonia lyase activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:24761 USPATFULL  
TITLE: Microbial conversion of glucose to para-hydroxystyrene  
INVENTOR(S): Ben-Bassat, Arie, Newark, DE, UNITED STATES  
Qi, Wei Wei, Broomall, PA, UNITED STATES  
Sariaslani, Fateme Sima, Wilmington, DE, UNITED STATES  
Tang, Xiao-Song, Hockessin, DE, UNITED STATES  
Vannelli, Todd M., Ithaca, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004018600	A1	20040129
APPLICATION INFO.:	US 2003-439478	A1	20030516 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-383450P	20020523 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2653	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 44 USPATFULL on STN  
TI Method for high-density microarray mediated gene expression profiling  
AB The global effect on genes under different environmental conditions can be determined by a comprehensive gene expression profile. The present invention provides a method to monitor the changes in comprehensive cellular gene expression levels at single length resolution by using a high-density microarray prepared with a comprehensive collection of ORFs

of a genome. Under different environmental conditions, directly and indirectly affected genes can be detected as the gene expression levels are induced or repressed in comparison to the control.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:2074 USPATFULL  
TITLE: Method for high-density microarray mediated gene expression profiling  
INVENTOR(S): Larossa, Robert A., West Chester, PA, UNITED STATES  
Wei, Yan, West Caldwell, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004002094	A1	20040101
APPLICATION INFO.:	US 2003-393075	A1	20030320 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-686383, filed on 11 Oct 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-159898P	19991015 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	3850	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 44 USPATFULL on STN  
TI Nucleic acid that encodes a fusion protein  
AB This invention provides fusion polypeptides that include a glycosyltransferase catalytic domain and a catalytic domain from an accessory enzyme that is involved in making a substrate for a glycosyltransferase reaction. Nucleic acids that encode the fusion polypeptides are also provided, as are host cells for expressing the fusion polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:265399 USPATFULL  
TITLE: Nucleic acid that encodes a fusion protein  
INVENTOR(S): Gilbert, Michel, Hull, CANADA  
Young, N. Martin, Gloucester, CANADA  
Wakarchuk, Warren W., Gloucester, CANADA  
PATENT ASSIGNEE(S): National Research Council of Canada, Ottawa, CANADA, K1A0R6 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003186414	A1	20031002
APPLICATION INFO.:	US 2002-317428	A1	20021211 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-211691, filed on 14 Dec 1998, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-69443P	19971215 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	



NUMBER OF CLAIMS: 35  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Page(s)  
LINE COUNT: 2369  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 44 USPATFULL on STN  
TI Fusion protein comprising a UDP-Galnac 4' epimerase and a galnac transferase  
AB This invention provides fusion polypeptides that include a glycosyltransferase catalytic domain and a catalytic domain from an accessory enzyme that is involved in making a substrate for a glycosyltransferase reaction. Nucleic acids that encode the fusion polypeptides are also provided, as are host cells for expressing the fusion polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:257877 USPATFULL  
TITLE: Fusion protein comprising a UDP-Galnac 4' epimerase and a galnac transferase  
INVENTOR(S): Gilbert, Michel, Hull, CANADA  
Young, N. Martin, Gloucester, CANADA  
Wakarchuk, Warren W., Gloucester, CANADA  
PATENT ASSIGNEE(S): National Research Council of Canada, Ottawa, CANADA, K1A0R6 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003180928	A1	20030925
APPLICATION INFO.:	US 2002-317773	A1	20021211 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-211691, filed on 14 Dec 1998, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-69443P	19971215 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	2203	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 44 USPATFULL on STN  
TI Isolation and expression of a gene for a nitrilase from Acidovorax facilis 72W  
AB Recombinant microbial strains are provided that express nitrilase enzyme and are useful as biocatalysts for the hydrolysis of nitrile-containing substrates. The recombinant cells are transformed with a foreign gene isolated from Acidovorax facilis 72W encoding a thermostable nitrilase enzyme that catalyzes the hydrolysis of nitrile-containing substrates to carboxylic acids under mild reaction conditions. The nucleotide sequence of the nitrilase gene and the deduced amino acid sequence encoded by the nitrilase gene are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:237811 USPATFULL  
TITLE: Isolation and expression of a gene for a nitrilase from Acidovorax facilis 72W  
INVENTOR(S): Chauhan, Sarita, Landenberg, PA, UNITED STATES  
Dicosimo, Robert, Rockland, DE, UNITED STATES

Fallon, Robert D., Elkton, MD, UNITED STATES  
Gavagan, John E., Wilmington, DE, UNITED STATES  
Payne, Mark S., Wilmington, DE, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003165968	A1	20030904
APPLICATION INFO.:	US 2003-376653	A1	20030227 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-823373, filed on 30 Mar 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-193707P	20000331 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805	
NUMBER OF CLAIMS:	46	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	2516	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L8 ANSWER 6 OF 44 USPATFULL on STN

TI Process for the biological production of 1,3-propanediol with high titer

AB The present invention provides an improved method for the biological production of 1,3-propanediol from a fermentable carbon source in a single microorganism. In one aspect of the present invention, an improved process for the conversion of glucose to 1,3-propanediol is achieved by the use of an E. coli transformed with the **Klebsiella pneumoniae** dha regulon genes dhaR, orfY, dhaT, orfX, orfW, dhaB1, dhaB2, dhaB3, and orfZ, all these genes arranged in the same genetic organization as found in wild type **Klebsiella pneumoniae**. In another aspect of the present invention, an improved process for the production of 1,3-propanediol from glucose using a recombinant E. coli containing genes encoding a G3PDH, a G3P phosphatase, a dehydratase, and a dehydratase reactivation factor compared to an identical process using a recombinant E. coli containing genes encoding a G3PDH, a G3P phosphatase, a dehydratase, a dehydratase reactivation factor and a 1,3-propanediol oxidoreductase (dhaT). The dramatically improved process relies on the presence in E. coli of a gene encoding a non-specific catalytic activity sufficient to convert 3-hydroxypropionaldehyde to 1,3-propanediol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:225862 USPATFULL

TITLE: Process for the biological production of 1,3-propanediol with high titer

INVENTOR(S): Emptage, Mark, Wilmington, DE, UNITED STATES  
Haynie, Sharon L., Philadelphia, PA, UNITED STATES  
Laffend, Lisa A., Claymont, DE, UNITED STATES  
Pucci, Jeff P., Pacifica, CA, UNITED STATES  
Whited, Gregory Marshall, Belmont, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003157674	A1	20030821
APPLICATION INFO.:	US 2002-277249	A1	20021021 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-641652, filed on 18 Aug 2000, PENDING		

NUMBER	DATE
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PRIORITY INFORMATION: US 1999-149534P 19990818 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT  
RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417  
LANCASTER PIKE, WILMINGTON, DE, 19805  
NUMBER OF CLAIMS: 29  
EXEMPLARY CLAIM: 1  
LINE COUNT: 3915  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 44 USPATFULL on STN  
TI Method for high-density microarray medicated gene expression profiling  
AB The global effect on genes under different environmental conditions can  
be determined by a comprehensive gene expression profile. The present  
invention provides a method to monitor the changes in comprehensive  
cellular gene expression levels at single length resolution by using a  
high-density microarray prepared with a comprehensive collection of ORFs  
of a genome. Under different environmental conditions, directly and  
indirectly affected genes can be detected as the gene expression levels  
are induced or repressed in comparison to the control.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2003:222021 USPATFULL  
TITLE: Method for high-density microarray medicated gene  
expression profiling  
INVENTOR(S): Larossa, Robert A., West Chester, PA, United States  
Wei, Yan, West Caldwell, NJ, United States  
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6607885	B1	20030819
APPLICATION INFO.:	US 2000-686383		20001011 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-159898P	19991015 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Horlick, Kenneth R.	
ASSISTANT EXAMINER:	Wilder, Cynthia	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	2849	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 8 OF 44 USPATFULL on STN  
TI Process to separate 1,3-propanediol or glycerol, or a mixture thereof  
from a biological mixture  
AB A process is provided to separate 1,3-propanediol, glycerol, or a  
mixture of 1,3-propanediol and glycerol from a biological mixture using  
a molecular sieve.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2003:210113 USPATFULL  
TITLE: Process to separate 1,3-propanediol or glycerol, or a  
mixture thereof from a biological mixture  
INVENTOR(S): Corbin, David Richard, West Chester, PA, United States  
Norton, Tucker, Avondale, PA, United States  
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE,

## United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6603048	B1	20030805
APPLICATION INFO.:	US 2000-677121		20000929 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-157773P	19991005 (60)
	US 1999-158204P	19991007 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Richter, Johann	
ASSISTANT EXAMINER:	Price, Elvis O.	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	788	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 9 OF 44 USPATFULL on STN

TI Processes for producing optically active 2-amino-1-phenylethanol derivatives

AB An (R)-2-amino-1-phenylethanol derivative shown by the general formula (IIa) ##STR1##

wherein R.sup.1 and R.sup.5 represent a hydrogen atom, etc.; R.sup.2, R.sup.3 and R.sup.4 independently represent a halogen atom, etc., or a salt thereof, can readily be produced (1) by permitting a microorganism belonging to the genus Rhodospiridium, the genus Comamonas or the like to act on a mixture of corresponding (R)-form and (S)-form to asymmetrically utilize, or (2) by permitting a microorganism belonging to the genus Lodderomyces, the genus Pilimelia or the like to act on a corresponding aminoketone derivative to asymmetrically reduce. An (R,R)-1-phenyl-2-[(2-phenyl-1-alkylethyl)amino]ethanol derivative having a high optical purity can easily be obtained from the compound of the formula (IIa) or a salt thereof. Said derivative is useful as an intermediate for producing an anti-obesity agent and so on.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:207343 USPATFULL

TITLE: Processes for producing optically active 2-amino-1-phenylethanol derivatives

INVENTOR(S): Matsuyama, Akinobu, Arai-shi, JAPAN

Ito, Michio, Joetsu-shi, JAPAN

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143701	A1	20030731
APPLICATION INFO.:	US 2002-208047	A1	20020731 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-597830, filed on 19 Jun 2000, PENDING Division of Ser. No. US 1998-95733, filed on 11 Jun 1998, GRANTED, Pat. No. US 6114582 Division of Ser. No. US 1996-738864, filed on 28 Oct 1996, GRANTED, Pat. No. US 5811293 Division of Ser. No. US 1994-343952, filed on 17 Nov 1994, GRANTED, Pat. No. US 5629200		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-289419	19931118
	JP 1994-83014	19940424

JP 1993-319046 19931124  
 JP 1994-183217 19940804  
 JP 1994-40172 19940310  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: PILLSBURY WINTHROP, LLP, P.O. BOX 10500, MCLEAN, VA,  
 22102  
 NUMBER OF CLAIMS: 38  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 5163  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 10 OF 44 USPATFULL on STN  
 TI Methods for enzymatic conversion of GDP-mannose to GDP-fucose  
 AB This invention provides methods for practical enzymatic conversion of  
 GDP-mannose to GDP-fucose. These methods are useful for efficient  
 synthesis of reactants used in the synthesis of fucosylated  
 oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:207209 USPATFULL  
 TITLE: Methods for enzymatic conversion of GDP-mannose to  
 GDP-fucose  
 INVENTOR(S): Sjoberg, Eric R., San Diego, CA, UNITED STATES  
 PATENT ASSIGNEE(S): Cytel Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143567	A1	20030731
APPLICATION INFO.:	US 2002-206655	A1	20020725 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-231905, filed on 14 Jan 1999, GRANTED, Pat. No. US 6500661		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-71076P	19980115 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	55	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	2449	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 44 USPATFULL on STN  
 TI Nucleic acids useful for enzymatic conversion of GDP-mannose to  
 GDP-fucose  
 AB This invention provides methods for practical enzymatic conversion of  
 GDP-mannose to GDP-fucose. These methods are useful for efficient  
 synthesis of reactants used in the synthesis of fucosylated  
 oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:194592 USPATFULL  
 TITLE: Nucleic acids useful for enzymatic conversion of  
 GDP-mannose to GDP-fucose  
 INVENTOR(S): Sjoberg, Eric R., San Diego, CA, UNITED STATES  
 PATENT ASSIGNEE(S): Cytel Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003134403	A1	20030717

APPLICATION INFO.: US 2002-206485 A1 20020725 (10)  
RELATED APPLN. INFO.: Division of Ser. No. US 1999-231905, filed on 14 Jan  
1999, GRANTED, Pat. No. US 6500661

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-71076P	19980115 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	55	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	2445	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 12 OF 44 USPATFULL on STN

TI Solubility reporter gene constructs

AB The present invention provides polynucleotides that a protein solubility responsive promoter operatively linked to a reporter gene and a genetic reporter system comprising these polynucleotides together with an expression construct for a target protein. The invention also provides cells comprising polynucleotides of the invention and the genetic reporter system. These compositions are useful to monitor the solubility of a target protein in a cell and to identify mutations to the cell or mutations to a polynucleotide encoding the target protein that alters the solubility of the target protein. The invention further provides method to identify variations in a protein biosynthetic process that alter the solubility of a target protein and methods to screen an expression library of recombinant clones to identify clones that express soluble proteins. Finally, the invention discloses a novel method of identifying an antibiotic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:173250 USPATFULL  
TITLE: Solubility reporter gene constructs  
INVENTOR(S): Lesley, Scott A., San Diego, CA, UNITED STATES  
Knuth, Mark, El Cajon, CA, UNITED STATES  
PATENT ASSIGNEE(S): IRM LLC (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003119094	A1	20030626
APPLICATION INFO.:	US 2001-990099	A1	20011121 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-324833P	20010924 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TIMOTHY L. SMITH, GENOMICS INSTITUTE OF THE, NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SUITE E225, SAN DIEGO, CA, 92121-1127	
NUMBER OF CLAIMS:	76	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	2230	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 13 OF 44 USPATFULL on STN

TI 1,3-propanediol and polymer derivatives from a fermentable carbon source

AB A new polypropylene terephthalate composition is provided. The polypropylene terephthalate is comprised of 1,3-propanediol and

terephthalate. The 1,3-propanediol is produced by the bioconversion of a fermentable carbon source, preferable glucose. The resulting polypropylene terephthalate is distinguished from petrochemically produced polymer on the basis of dual carbon-isotopic fingerprinting which indicates both the source and the age of the carbon.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:120275 USPATFULL  
TITLE: 1,3-propanediol and polymer derivatives from a fermentable carbon source  
INVENTOR(S): Burch, Robert R., Exton, PA, UNITED STATES  
Dorsch, Robert R., Hockessin, DE, UNITED STATES  
Laffend, Lisa Anne, Claymont, DE, UNITED STATES  
Nagarajan, Vasantha, Wilmington, DE, UNITED STATES  
Nakamura, Charles, Claymont, DE, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003082756	A1	20030501
APPLICATION INFO.:	US 2002-213203	A1	20020805 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-369796, filed on 6 Aug 1999, GRANTED, Pat. No. US 6428767 Continuation-in-part of Ser. No. US 1997-966794, filed on 10 Nov 1997, GRANTED, Pat. No. US 6025184 Division of Ser. No. US 1995-440293, filed on 12 May 1995, GRANTED, Pat. No. US 5686276		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Page(s)		
LINE COUNT:	1785		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 14 OF 44 USPATFULL on STN  
TI Processes for producing optically active 2-amino-1-phenylethanol derivatives  
AB An (R)-2-amino-1-phenylethanol derivative shown by the general formula (IIa) ##STR1##

wherein R.sup.1 and R.sup.5 represent a hydrogen atom, etc.; R.sup.2, R.sup.3 and R.sup.4 independently represent a halogen atom, etc., or a salt thereof, can readily be produced (1) by permitting a microorganism belonging to the genus Rhodospiridium, the genus Comamonas or the like to act on a mixture of corresponding (R)-form and (S)-form to asymmetrically utilize, or (2) by permitting a microorganism belonging to the genus Lodderomyces, the genus Pilimelia or the like to act on a corresponding aminoketone derivative to asymmetrically reduce. An (R,R)-1-phenyl-2-[(2-phenyl-1-alkylethyl)amino]ethanol derivative having a high optical purity can easily be obtained from the compound of the formula (IIa) or a salt thereof. Said derivative is useful as an intermediate for producing an anti-obesity agent and so on.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:60322 USPATFULL  
TITLE: Processes for producing optically active 2-amino-1-phenylethanol derivatives  
INVENTOR(S): Akamatsu, Hidekazu, Arai, JAPAN  
Yamasaki, Noritsugu, Tsukuba, JAPAN  
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Osaka, JAPAN  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6528686	B1	20030304
APPLICATION INFO.:	US 2000-597830		20000619 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-95733, filed on 11 Jun 1998, now patented, Pat. No. US 6114582 Division of Ser. No. US 1996-738864, filed on 28 Oct 1996, now patented, Pat. No. US 5811293 Division of Ser. No. US 1994-343952, filed on 17 Nov 1994, now patented, Pat. No. US 5629200		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-289419	19931118
	JP 1993-319046	19931124
	JP 1994-40172	19940310
	JP 1994-83014	19940421
	JP 1994-183217	19940804
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Kumar, Shailendra	
LEGAL REPRESENTATIVE:	Pillsbury Winthrop LLP	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	4455	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L8 ANSWER 15 OF 44 USPATFULL on STN

TI Mutant 1,3-propanediol dehydrogenase

AB The present invention relates to mutant 1,3-propanediol dehydrogenase and a novel microorganism that is capable of growing in concentrations of at least 105 g/l 1,3-propanediol, levels normally toxic to wild-type microorganisms. The present invention also provides expression vectors and host cells comprising the mutant 1,3-propanediol dehydrogenase as well as methods for producing 1,3-propanediol comprising the use of cells comprising the mutant 1,3-propanediol dehydrogenase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:57527 USPATFULL

TITLE: Mutant 1,3-propanediol dehydrogenase

INVENTOR(S): Donald, Trimbur E., Redwood City, CA, UNITED STATES  
Gregory, Whited M., Belmont, CA, UNITED STATES  
Selifonova, Olga V., Navarre, MN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003040091	A1	20030227
	US 6558933	B2	20030506
APPLICATION INFO.:	US 2001-991138	A1	20011116 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-570778, filed on 14 May 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-134868P	19990519 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA, 94034-1013	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	



LINE COUNT: 914  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 16 OF 44 USPATFULL on STN

TI Process for the biological production of 1,3-propanediol with high titer  
AB The present invention provides an improved method for the biological production of 1,3-propanediol from a fermentable carbon source in a single microorganism. In one aspect of the present invention, an improved process for the conversion of glucose to 1,3-propanediol is achieved by the use of an E. coli transformed with the **Klebsiella pneumoniae** dha regulon genes dhaR, orfY, dhaT, orfX, orfW, dhaB1, dhaB2, dhaB3, and orfZ, all these genes arranged in the same genetic organization as found in wild type **Klebsiella pneumoniae**. In another aspect of the present invention, an improved process for the production of 1,3-propanediol from glucose using a recombinant E. coli containing genes encoding a G3PDH, a G3P phosphatase, a dehydratase, and a dehydratase reactivation factor compared to an identical process using a recombinant E. coli containing genes encoding a G3PDH, a G3P phosphatase, a dehydratase, a dehydratase reactivation factor and a 1,3-propanediol oxidoreductase (dhaT). The dramatically improved process relies on the presence in E. coli of a gene encoding a non-specific catalytic activity sufficient to convert 3-hydroxypropionaldehyde to 1,3-propanediol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:33323 USPATFULL  
TITLE: Process for the biological production of 1,3-propanediol with high titer  
INVENTOR(S): Emptage, Mark, Wilmington, DE, United States  
Haynie, Sharon L., Philadelphia, PA, United States  
Laffend, Lisa A., Claymont, DE, United States  
Pucci, Jeff P., Pacifica, CA, United States  
Whited, Gregory, Belmont, CA, United States  
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6514733	B1	20030204
APPLICATION INFO.:	US 2000-641652		20000818 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-149534P	19990818 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Prouty, Rebecca E.	
ASSISTANT EXAMINER:	Walicka, Malgorzata A	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	3730	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 17 OF 44 USPATFULL on STN

TI METHOD FOR THE RECOMBINANT PRODUCTION OF 1,3-PROPANEDIOL

AB The present invention provides an improved method for the production of 1,3-propanediol from a variety of carbon sources is an organism comprising DNA encoding protein X of a dehydratase or protein X in combination with at least one of protein 1, protein 2 and protein 3. The protein X may be isolated from a diol dehydratase or a glycerol dehydratase. The present invention also provides host cells comprising protein X that are capable of increased production of 1,3-propanediol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:30376 USPATFULL  
TITLE: METHOD FOR THE RECOMBINANT PRODUCTION OF  
1,3-PROPANEDIOL  
INVENTOR(S): DUNN-COLEMAN, NIGEL, LOS GATOS, CA, UNITED STATES  
DIAZ-TORRES, MARIA, SAN MATEO, CA, UNITED STATES  
CHASE, MATTHEW W., CHESTERFIELD, MO, UNITED STATES  
TRIMBUR, DONALD, REDWOOD CITY, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003022323	A1	20030130
APPLICATION INFO.:	US 1999-308207	A1	19990513 (9)
	WO 1997-US20873		19971113
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	DEBRA J GLAISTER, GENENCOR INTERNATIONAL INC, 925 PAGE MILL ROAD, PALO ALTO, CA, 94304		
NUMBER OF CLAIMS:	40		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	27 Drawing Page(s)		
LINE COUNT:	4264		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 18 OF 44 USPATFULL on STN  
TI Enzymatic conversion of GDP-mannose to GDP-fucose  
AB This invention provides methods for practical enzymatic conversion of  
GDP-mannose to GDP-fucose. These methods are useful for efficient  
synthesis of reactants used in the synthesis of fucosylated  
oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:346811 USPATFULL  
TITLE: Enzymatic conversion of GDP-mannose to GDP-fucose  
INVENTOR(S): Sjoberg, Eric R., San Diego, CA, United States  
PATENT ASSIGNEE(S): Neose Technologies, Inc., Horsham, PA, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6500661	B1	20021231
APPLICATION INFO.:	US 1999-231905		19990114 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-71076P	19980115 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Slobodyansky, Elizabeth	
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 11 Drawing Page(s)	
LINE COUNT:	2332	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 19 OF 44 USPATFULL on STN  
TI Mutant 1,3-propandiol dehydrogenase  
AB The present invention relates to mutant 1,3-propanediol dehydrogenase  
and a novel microorganism that is capable of growing in concentrations  
of at least 105 g/l 1,3-propanediol, levels normally toxic to wild-type  
microorganisms. The present invention also provides expression vectors  
and host cells comprising the mutant 1,3-propanediol dehydrogenase as  
well as methods for producing 1,3-propanediol comprising the use of

cells comprising the mutant 1,3-propanediol dehydrogenase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:275923 USPATFULL  
TITLE: Mutant 1,3-propanediol dehydrogenase  
INVENTOR(S): Donald, Trimbur E., Redwood City, CA, United States  
Gregory, Whited M., Belmont, CA, United States  
Selifonova, Olga V., Navarre, MN, United States  
PATENT ASSIGNEE(S): Genencor International, Inc., Rochester, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6468773	B1	20021022
APPLICATION INFO.:	US 2000-570778		20000514 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-134868P	19990519 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Achutamurthy, Ponnathapu	
ASSISTANT EXAMINER:	Pak, Y	
LEGAL REPRESENTATIVE:	Ito, Richard T.	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	922	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 20 OF 44 USPATFULL on STN

TI Method for the production of 1,3-propanediol by recombinant organisms comprising genes for vitamin B12 transport

AB Recombinant organisms are provided comprising genes encoding genes encoding glycerol dehydratase, 1,3-propanediol oxidoreductase, a gene encoding vitamin B.sub.12 receptor precursor(BtuB), a gene encoding vitamin B.sub.12 transport system permease protein(BtuC) and a gene encoding vitamin B.sub.12 transport ATP-binding protein (BtuD). The recombinant microorganism is contacted with a carbon substrate and 1,3-propanediol is isolated from the growth media.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:201883 USPATFULL  
TITLE: Method for the production of 1,3-propanediol by recombinant organisms comprising genes for vitamin B12 transport  
INVENTOR(S): Bulthuis, Ben A., Hoofddorp, NETHERLANDS  
Whited, Gregory M., Belmont, CA, United States  
Trimbur, Donald E., Redwood City, CA, United States  
Gatenby, Anthony A., Wilmington, DE, United States  
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)  
Genencor International, Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6432686	B1	20020813
APPLICATION INFO.:	US 1999-307973		19990510 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-85190P	19980512 (60)
DOCUMENT TYPE:	Utility	

FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Prouty, Rebecca E.  
ASSISTANT EXAMINER: Monshipouri, Maryam  
NUMBER OF CLAIMS: 13  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 2037  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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<u>L10</u> laffend.in.	4	<u>L10</u>
<u>L9</u> dihydorxyacetone and L8	3	<u>L9</u>
<u>L8</u> glycerol dehydratase and L7	92557	<u>L8</u>
<u>L7</u> Citrobacter and L6	17	<u>L7</u>
<u>L6</u> L5 and Klebsiella	69	<u>L6</u>
<u>L5</u> L4 and (1,3-propanediol)	7750	<u>L5</u>
<u>L4</u> bioconversion process	1742378	<u>L4</u>
<u>L3</u> 5633362.pn.	1	<u>L3</u>
<u>L2</u> 5821092.pn.	1	<u>L2</u>
<u>L1</u> 6025184.pn.	1	<u>L1</u>

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### Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6514733 B1

L10: Entry 1 of 4

File: USPT

Feb 4, 2003

US-PAT-NO: 6514733

DOCUMENT-IDENTIFIER: US 6514733 B1

TITLE: Process for the biological production of 1,3-propanediol with high titer

DATE-ISSUED: February 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Emptage; Mark	Wilmington	DE		
Haynie; Sharon L.	Philadelphia	PA		
<u>Laffend</u> ; Lisa A.	Claymont	DE		
Pucci; Jeff P.	Pacifica	CA		
Whited; Gregory	Belmont	CA		

US-CL-CURRENT: 435/158; 435/155, 435/252.33

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KWIC	Draw De
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☐ 2. Document ID: US 6428767 B1

L10: Entry 2 of 4

File: USPT

Aug 6, 2002

US-PAT-NO: 6428767

DOCUMENT-IDENTIFIER: US 6428767 B1

TITLE: Method for identifying the source of carbon in 1,3-propanediol

DATE-ISSUED: August 6, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Burch; Robert R.	Exton	PA		
Dorsch; Robert R.	Hockessin	DE		
<u>Laffend</u> ; Lisa Anne	Claymont	DE		
Nagarajan; Vasantha	Wilmington	DE		

Nakamura; Charles Claymont DE

US-CL-CURRENT: 424/1.37; 250/281, 250/282, 424/1.11, 435/6, 435/93

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 6025184 A

L10: Entry 3 of 4

File: USPT

Feb 15, 2000

US-PAT-NO: 6025184

DOCUMENT-IDENTIFIER: US 6025184 A

TITLE: Bioconversion of a fermentable carbon source to 1,3-propanediol by a single microorganism

DATE-ISSUED: February 15, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Laffend</u> ; Lisa Anne	Wilmington	DE		
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles Edwin	Claymont	DE		

US-CL-CURRENT: 435/252.33; 435/252.3, 435/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 5686276 A

L10: Entry 4 of 4

File: USPT

Nov 11, 1997

US-PAT-NO: 5686276

DOCUMENT-IDENTIFIER: US 5686276 A

TITLE: Bioconversion of a fermentable carbon source to 1,3-propanediol by a single microorganism

DATE-ISSUED: November 11, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Laffend</u> ; Lisa Anne	Wilmington	DE		
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles Edwin	Claymont	DE		

US-CL-CURRENT: 435/158; 435/252.31, 435/252.33

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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Terms

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## Refine Search

### Search Results -

Terms	Documents
dihydorxyacetone and L8	3

Database:

☐ US Pre-Grant Publication Full-Text Database  
☒ US Patents Full-Text Database  
☐ US OCR Full-Text Database  
☐ EPO Abstracts Database  
☐ JPO Abstracts Database  
☐ Derwent World Patents Index  
☐ IBM Technical Disclosure Bulletins

Search:

L9





### Search History

 DATE: Friday, June 04, 2004    [Printable Copy](#)    [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

DB=USPT; PLUR=YES; OP=OR

<u>L9</u>	dihydorxyacetone and L8	3	<u>L9</u>
<u>L8</u>	glycerol dehydratase and L7	92557	<u>L8</u>
<u>L7</u>	Citrobacter and L6	17	<u>L7</u>
<u>L6</u>	L5 and Klebsiella	69	<u>L6</u>
<u>L5</u>	L4 and (1,3-propanediol)	7750	<u>L5</u>
<u>L4</u>	bioconversion process	1742378	<u>L4</u>
<u>L3</u>	5633362.pn.	1	<u>L3</u>
<u>L2</u>	5821092.pn.	1	<u>L2</u>
<u>L1</u>	6025184.pn.	1	<u>L1</u>

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### Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 6479438 B2

L9: Entry 1 of 3

File: USPT

Nov 12, 2002

US-PAT-NO: 6479438

DOCUMENT-IDENTIFIER: US 6479438 B2

TITLE: Gel inhibited liquid carrier for a biocide containing a carbodiimide and an emulsifier mixture

DATE-ISSUED: November 12, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Narayanan; Kolazi S.	Wayne	NJ		
Jon; Domingo I.	New York	NY		

US-CL-CURRENT: [504/363](#); [514/241](#), [514/637](#), [514/788](#)

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">FIND</a>	<a href="#">Draw De</a>
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☐ 2. Document ID: US 6020367 A

L9: Entry 2 of 3

File: USPT

Feb 1, 2000

US-PAT-NO: 6020367

DOCUMENT-IDENTIFIER: US 6020367 A

TITLE: Supersaturated ascorbic acid solutions

DATE-ISSUED: February 1, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duffy; John A.	West Milford	NJ		
Ptchelintsev; Dmitri	Mahwah	NJ		

US-CL-CURRENT: [514/474](#); [424/401](#), [424/450](#), [424/489](#), [424/490](#), [514/263.31](#), [514/440](#), [514/456](#), [514/457](#), [549/315](#)

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">FIND</a>	<a href="#">Draw De</a>
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☐ 3. Document ID: US 5962018 A

L9: Entry 3 of 3

File: USPT

Oct 5, 1999

US-PAT-NO: 5962018

DOCUMENT-IDENTIFIER: US 5962018 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method of treating the skin with organic acids in anhydrous microsphere delivery systems

DATE-ISSUED: October 5, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Curtis; Ernest S.	Milford	PA		
Kalafsky; Robert	Ogdensburg	NJ		
Kaplan; Elinor R.	Paterson	NJ		

US-CL-CURRENT: 424/450; 514/557, 514/574

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FWOC	Draw D
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☐ 1. Document ID: US 6603048 B1

L7: Entry 1 of 17

File: USPT

Aug 5, 2003

US-PAT-NO: 6603048

DOCUMENT-IDENTIFIER: US 6603048 B1

TITLE: Process to separate 1,3-propanediol or glycerol, or a mixture thereof from a biological mixture

DATE-ISSUED: August 5, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Corbin; David Richard	West Chester	PA		
Norton; Tucker	Avondale	PA		

US-CL-CURRENT: 568/868; 568/869, 568/870

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw. Da
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☐ 2. Document ID: US 6576450 B2

L7: Entry 2 of 17

File: USPT

Jun 10, 2003

US-PAT-NO: 6576450

DOCUMENT-IDENTIFIER: US 6576450 B2

TITLE: Polyhydroxyalkanoate production from polyols

DATE-ISSUED: June 10, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Skrally; Frank A.	Boston	MA		
Peoples; Oliver P.	Arlington	MA		

US-CL-CURRENT: 435/135

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw. Da
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☐ 3. Document ID: US 6514733 B1

L7: Entry 3 of 17

File: USPT

Feb 4, 2003

US-PAT-NO: 6514733

DOCUMENT-IDENTIFIER: US 6514733 B1

TITLE: Process for the biological production of 1,3-propanediol with high titer

DATE-ISSUED: February 4, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Emptage; Mark	Wilmington	DE		
Haynie; Sharon L.	Philadelphia	PA		
Laffend; Lisa A.	Claymont	DE		
Pucci; Jeff P.	Pacifica	CA		
Whited; Gregory	Belmont	CA		

US-CL-CURRENT: 435/158; 435/155, 435/252.33

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Draw D
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☐ 4. Document ID: US 6432686 B1

L7: Entry 4 of 17

File: USPT

Aug 13, 2002

US-PAT-NO: 6432686

DOCUMENT-IDENTIFIER: US 6432686 B1

TITLE: Method for the production of 1,3-propanediol by recombinant organisms comprising genes for vitamin B12 transport

DATE-ISSUED: August 13, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bulthuis; Ben A.	Hoofddorp			NL
Whited; Gregory M.	Belmont	CA		
Trimbur; Donald E.	Redwood City	CA		
Gatenby; Anthony A.	Wilmington	DE		

US-CL-CURRENT: 435/158; 435/252.3, 435/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Draw D
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☐ 5. Document ID: US 6428992 B1

L7: Entry 5 of 17

File: USPT

Aug 6, 2002

US-PAT-NO: 6428992  
DOCUMENT-IDENTIFIER: US 6428992 B1

TITLE: Process for the purification of 1,3-propanediol from a fermentation medium

DATE-ISSUED: August 6, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Roturier; Jean-Michel	Chappelle d'Armentieres			FR
Fouache; Catherine	Sailly la Bourse			FR
Berghmans; Elie	Erps Kwerps			BE

US-CL-CURRENT: 435/158; 435/106, 435/115, 435/116, 562/513

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Drawings
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☐ 6. Document ID: US 6428767 B1

L7: Entry 6 of 17

File: USPT

Aug 6, 2002

US-PAT-NO: 6428767  
DOCUMENT-IDENTIFIER: US 6428767 B1

TITLE: Method for identifying the source of carbon in 1,3-propanediol

DATE-ISSUED: August 6, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Burch; Robert R.	Exton	PA		
Dorsch; Robert R.	Hockessin	DE		
Laffend; Lisa Anne	Claymont	DE		
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles	Claymont	DE		

US-CL-CURRENT: 424/1.37; 250/281, 250/282, 424/1.11, 435/6, 435/93

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Drawings
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☐ 7. Document ID: US 6406895 B1

L7: Entry 7 of 17

File: USPT

Jun 18, 2002

US-PAT-NO: 6406895  
DOCUMENT-IDENTIFIER: US 6406895 B1

TITLE: Process for the production of 1,3-propanediol by fermentation

DATE-ISSUED: June 18, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Defretin; Sophie	Locon			FR
Delelis; Brigitte	Vendin les Bethune			FR
Segueilha; Laurent	Lambersart			FR

US-CL-CURRENT: 435/158; 435/252.31, 435/252.33, 435/252.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMCD	Draw D
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☐ 8. Document ID: US 6329183 B1

L7: Entry 8 of 17

File: USPT

Dec 11, 2001

US-PAT-NO: 6329183

DOCUMENT-IDENTIFIER: US 6329183 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Polyhydroxyalkanoate production from polyols

DATE-ISSUED: December 11, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Skraly; Frank A.	Boston	MA		
Peoples; Oliver P.	Arlington	MA		

US-CL-CURRENT: 435/135

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMCD	Draw D
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☐ 9. Document ID: US 6136576 A

L7: Entry 9 of 17

File: USPT

Oct 24, 2000

US-PAT-NO: 6136576

DOCUMENT-IDENTIFIER: US 6136576 A

TITLE: Method for the recombinant production of 1,3-propanediol

DATE-ISSUED: October 24, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Diaz-Torres; Maria	San Mateo	CA		
Dunn-Coleman; Nigel S	Los Gatos	CA		
Chase; Matthew W.	Belmont	CA		
Trimbur; Donald	Redwood City	CA		

US-CL-CURRENT: 435/158; 435/232, 530/350, 536/23.1, 536/23.2, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	EMC	Draw De
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☐ 10. Document ID: US 6025184 A

L7: Entry 10 of 17

File: USPT

Feb 15, 2000

US-PAT-NO: 6025184

DOCUMENT-IDENTIFIER: US 6025184 A

TITLE: Bioconversion of a fermentable carbon source to 1,3-propanediol by a single microorganism

DATE-ISSUED: February 15, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Laffend; Lisa Anne	Wilmington	DE		
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles Edwin	Claymont	DE		

US-CL-CURRENT: 435/252.33; 435/252.3, 435/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	EMC	Draw De
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L7: Entry 11 of 17

File: USPT

Jan 11, 2000

US-PAT-NO: 6013494

DOCUMENT-IDENTIFIER: US 6013494 A

TITLE: Method for the production of 1,3-propanediol by recombinant microorganisms

DATE-ISSUED: January 11, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nakamura; Charles E.	Claymont	DE		
Gatenby; Anthony A.	Wilmington	DE		
Hsu; Amy Kuang-Hua	Redwood City	CA		
La Reau; Richard D.	Mountain View	CA		
Haynie; Sharon L.	Philadelphia	PA		
Diaz-Torres; Maria	San Mateo	CA		
Trimbur; Donald E.	Redwood City	CA		
Whited; Gregory M.	Belmont	CA		
Nagarajan; Vasanth	Wilmington	DE		
Payne; Mark S.	Wilmington	DE		
Picataggio; Stephen K.	Landenberg	PA		
Nair; Ramesh V.	Wilmington	DE		

US-CL-CURRENT: 435/158; 435/252.3, 435/252.33, 435/254.21, 435/69.1

Full

Title

Citation

Front

Review

Classification

Date

Reference

Sequences

Attachments

Claims

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☐ 12. Document ID: US 5821092 A

L7: Entry 12 of 17

File: USPT

Oct 13, 1998

US-PAT-NO: 5821092

DOCUMENT-IDENTIFIER: US 5821092 A

TITLE: Production of 1,3-propanediol from glycerol by recombinant bacteria expressing recombinant diol dehydratase

DATE-ISSUED: October 13, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles Edwin	Claymont	DE		

US-CL-CURRENT: 435/158; 435/232, 435/252.3, 435/252.31, 435/252.33, 435/252.35,  
435/252.5, 435/252.7, 435/320.1, 536/23.1, 536/23.2, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 13. Document ID: US 5686276 A

L7: Entry 13 of 17

File: USPT

Nov 11, 1997

US-PAT-NO: 5686276

DOCUMENT-IDENTIFIER: US 5686276 A

TITLE: Bioconversion of a fermentable carbon source to 1,3-propanediol by a single microorganism

DATE-ISSUED: November 11, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Laffend; Lisa Anne	Wilmington	DE		
Nagarajan; Vasantha	Wilmington	DE		
Nakamura; Charles Edwin	Claymont	DE		

US-CL-CURRENT: 435/158; 435/252.31, 435/252.33

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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☐ 14. Document ID: US 5633362 A

L7: Entry 14 of 17

File: USPT

May 27, 1997

US-PAT-NO: 5633362

DOCUMENT-IDENTIFIER: US 5633362 A

**\*\* See image for Certificate of Correction \*\***TITLE: Production of 1,3-propanediol from glycerol by recombinant bacteria expressing recombinant diol dehydratase

DATE-ISSUED: May 27, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nagarajan; Vasantha	Wilmington	DE		

Nakamura; Charles E. Claymont DE

US-CL-CURRENT: 536/23.1; 435/252.3, 435/252.33, 536/22.1, 536/24.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw De
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☐ 15. Document ID: US 5599689 A

L7: Entry 15 of 17

File: USPT

Feb 4, 1997

US-PAT-NO: 5599689

DOCUMENT-IDENTIFIER: US 5599689 A

TITLE: Process for making 1,3-propanediol from carbohydrates using mixed microbial cultures

DATE-ISSUED: February 4, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Haynie; Sharon L.	Philadelphia	PA		
Wagner; Lorraine W.	Newark	DE		

US-CL-CURRENT: 435/42; 435/158

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw De
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☐ 16. Document ID: US 5254467 A

L7: Entry 16 of 17

File: USPT

Oct 19, 1993

US-PAT-NO: 5254467

DOCUMENT-IDENTIFIER: US 5254467 A

TITLE: Fermentive production of 1,3-propanediol

DATE-ISSUED: October 19, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kretschmann; Josef	Langenfeld			DE
Carduck; Franz-Josef	Haan			DE
Deckwer; Wolf-Dieter	Oldenburg			DE
Tag; Carmen	Brunswick			DE
Biebl; Hanno	Wolfenbuettel			DE

US-CL-CURRENT: 435/158; 435/842

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw De
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☐ 17. Document ID: US 5164309 A

L7: Entry 17 of 17

File: USPT

Nov 17, 1992

US-PAT-NO: 5164309

DOCUMENT-IDENTIFIER: US 5164309 A

TITLE: Process for the microbiological preparation of 1,3-propane-diol from  
glycerol by citrobacter

DATE-ISSUED: November 17, 1992

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gottschalk; G.	Nortenhardenberg			DE
Averhoff; Beate	Gottingen			DE

US-CL-CURRENT: 435/158; 435/252.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Draw De
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Terms	Documents
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